



July 11, 2016

Ex Parte

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: *Use of Spectrum Bands Above 24 GHz for Mobile Radio Service*, GN Docket No. 14-177

Dear Ms. Dortch:

On July 7, 2016 Michael Calabrese, representing New America's Open Technology Institute (OTI), and Harold Feld and Dallas Harris, representing Public Knowledge (PK), met with Edward Smith, wireless legal advisor to Chairman Tom Wheeler, and Ariel Diamond, legal intern to the Chairman, concerning the above-listed proceeding.

The advocates initially indicated disappointment that the draft order on circulation reportedly allocates all but 600 megahertz of the more than 3,000 megahertz across the 28, 37 and 39 GHz bands to exclusive licensing over wide geographic areas (PEAs and counties). We reiterated points that public interest groups and others made in comments and reply comments arguing that exclusive wide-area licensing by auction is a poor fit with the propagation characteristics of millimeter wave spectrum that is inherently intended for small cell deployments in localized, high-traffic areas in urban cores and busy indoor venues. If a few large carriers foreclose access to 80 percent or more of these mmW frequencies, both outdoors and indoors, the likely outcome will be to leave the spectrum fallow in the vast majority of the country and in tens of millions of homes, businesses and community anchor institutions.

The advocates went on to express concern that the order reportedly does not explicitly decide that the 600 megahertz from 37 to 37.6 GHz will be open to the public for General Authorized Access (GAA), or its equivalent. The advocates reiterated their view that at least half of the 37 GHz band (800 megahertz) should be set aside for open and innovative GAA use. The advocates requested that the order be very clear that the license-by-rule access will be open and conceptually identical to GAA under the Part 96 rules adopted for the 3.5 GHz Citizens Broadband Radio Service. We strongly oppose leaving open any possibility that all or any portion of this *de minimus* 600 megahertz set-aside could end up being auctioned as the equivalent of Priority Access Licenses (PALs). Setting aside a substantial share of the currently unlicensed 37 GHz band (at least 600 megahertz) for GAA, subject to a Spectrum Access System (SAS) governance model, creates a flexible sharing framework that protects band incumbents, facilitates efficient spectrum re-use, and promotes lower barriers to entry and innovation.

The advocates also reiterated their strong support for a robust “use-or-share” obligation on mmW licensees that authorizes opportunistic access to unused spectrum capacity in the 28, 37 and 39 GHz bands. We recommended that the Commission adopt a use-or-share obligation in this initial framework order, as it did in the initial order adopting the Citizens Broadband Radio Service at 3.5 GHz last year, even if the implementation details are deferred to the FNPRM (e.g., protection contours for licensee operations and whether a mmW SAS is needed). Widespread opportunistic access can enhance efficient reuse of mmW spectrum without any risk to licensee operations by relying on a geolocation database governance mechanism that is either an extension of, or similar to, the SAS the Commission will certify to manage more intensive sharing of the 3.5 GHz band. Further, OTI and PK see no public interest justification for the proposed five-year waiting period before fallow spectrum can be put to use.

With respect to interoperability across the 37 GHz band, OTI and PK believe that although it could be beneficial to extend the requirement to include the 37 to 37.6 GHz band (even though this band will not be exclusively licensed), there should be an exception made for devices certified under Part 15 to the extent that those devices will not be certified to operate above 37.6 GHz. OTI and PK support an interoperability requirement that fosters competition among licensees across the 37 to 39 GHz bands, as well as our support for a requirement that would require those devices to operate on 37 to 37.6 GHz as well. Like the interoperability requirement adopted for the 3.5 GHz band, we believe that the public’s use of 37 to 37.6 GHz spectrum on a GAA basis could be more cost-effective using mass market devices and access points developed for the broader 37 GHz ecosystem.

At the same time, however, if the Commission does not intend to certify Part 15 devices (e.g., variations of IEEE 802.11) to operate above 37.6 GHz – for example, for opportunistic use in areas where that spectrum is left vacant, pursuant to a robust use-or-share obligation – then it should make an exception for devices certified under Part 15 and not burden manufacturers and operators with the additional cost of ensuring their operability over the entire 37 to 39 GHz range of frequencies.

The advocates went on to express concern that a spectrum screen based on 1,250 megahertz for the 28, 37 and 39 GHz bands is utterly inconsistent with the Commission’s policy goals concerning mobile market competition. The Commission has consistently indicated that it wants four-firm competition, yet its spectrum screen – and this proposed screen to an even greater degree – potentially restricts competition to at most three firms. The Commission’s broader goals – to promote competition and to avoid foreclosure and spectrum warehousing – suggest the agency should not simply replicate the screen for low-to-mid band spectrum. Adopting a screen that facilitates four-firm competition is a very straightforward policy rationale that could be reconsidered and relaxed, if appropriate, in the future when the Commission actually has solid information about the nature of 5G services, business models and market dynamics. Right now the Commission has no idea whether new forms of competition will arise in these bands – and only knows that the largest nationwide carriers are positioning to foreclose access indefinitely by acquiring exclusive, automatically-renewing licenses to most if not all mmW spectrum.

OTI and PK suggest that, at a minimum, the order should explicitly put the wireless industry on notice that this screen is preliminary and will be revisited as the FCC gains experience with the services and market that develops going forward. The Commission should acknowledge it doesn’t know enough

yet about how the market will evolve, or how much additional and comparable mmW spectrum will be assigned in future orders, and so it will need to reconsider the screen for these bands periodically.

Finally, the advocates expressed concern that the licensing areas – PEAs and counties – are too large relative to the propagation characteristics and the potential to allow market entry by smaller, more localized and more site-based operators. The Commission will auction PALs by census tract in the 3.5 GHz band, which is similarly small cell in nature, and could do the same here.

Respectfully submitted,

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cc: Edward (Smitty) Smith